

Appl. No. 10/739,418  
Response dated November 9, 2005  
Reply to Office action dated August 9, 2005

## **Remarks**

Applicant thanks Examiner Nguyen for the careful examination and the clear explanation of the claim rejections; and for conditionally allowing claim 16. Responsive to the Office action, applicant cancels claims 17 and 18. Regarding the claim rejections, applicants replies as follows:

### **Claim 1**

Claim 1 describes a semiconductor device that comprises three elements:

- a) a plurality of spaced-apart substrate segments;
- b) an integrated circuit chip mounted on one of said segments; and
- c) a flexible interconnection layer supporting said substrate segments.

The Office action cites the Kraus patent as anticipating claim 1; but the Kraus patent does not disclose at least the element (c) of claim 1 and therefore can not anticipate the claim.

The Office action proposes that layer 3 is a flexible interconnection layer supporting the substrate segments. The Office action cites the cover figure and the entire description section of the Kraus patent to support this proposition; but neither the cover figure nor the description section discloses layer 3 as a flexible interconnection layer.

The description of layer 3 – the substrate, is instead in the BACKGROUND OF THE INVENTION section of the Kraus patent:

... it is the practice in modern packaging technology to mount many integrated circuit chip devices on a common substrate which interconnects the

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*network*. After the substrate has been laminated and sintered, there is no practical method of changing the buried internal network.<sup>1</sup>

It is clear from this description that Kraus discloses a substrate that is made of laminated and sintered ceramic material. It is well known in the semiconductor art that a ceramic substrate is not a flexible interconnection layer, which is required in claim 1 of the instant application.

Because the Kraus patent fails to disclose at least element (c) of claim 1, it does not anticipate the claim. Applicant respectfully submits that claim 1 stands patentable over the Kraus patent.

#### Claim 4

Claim 4 stands rejected by the combination of Kraus patent and the Tada patent. However, the Tada patent discloses a polymeric film and the Kraus patent discloses a ceramic substrate. It is well known in the art that a polymeric film is not a ceramic substrate; the two references thus can not be combined as each would render the other in-operable for their respective intended purpose. Therefore, claim 4 is not rendered obvious by the Kraus patent in view of the Tada patent. Applicant respectfully submits that claim 4 stands patentable over the cited references.

#### Claim 12

Claim 12 describes a multi-chip module and it includes a flexible interconnection layer, on which substrate segments are mounted. As presented in a previous paragraph regarding claim 1, the Kraus patent does not disclose this element.

Claim 12 also requires electronic components mounted on both opposing surfaces

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Because the Kraus patent fails to disclose all the elements in claim 12, it does not anticipate the claim. Applicant respectfully submits that claim 12 stands patentable over the Kraus patent.

Claims 2, 3, 5-9, and 11

Claims 2, 3, 5-9, and 11 properly depend from claim 1. Because claim 1 stands patentable, claims 2, 3, 5-9, and 11 stand patentable, at least by virtue of their dependence.

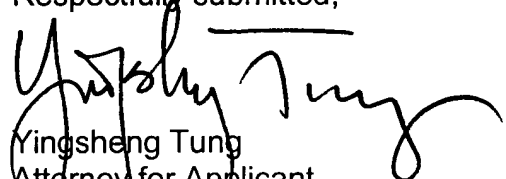
Claims 13-16

Claims 13-16 properly depend from claim 12. Because claim 12 stands patentable, claims 13-16 stand patentable, at least by virtue of their dependence.

In summary, applicant respectfully submits that this application is in allowable form and all pending claims distinguish over the cited references and stands patentable. Applicant respectfully request further examination of this application and timely allowance of the pending claims.

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Respectfully submitted,

  
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